Subject/USFW Retiree: Jim Voelzer
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Interviewed by: John Cornely

John:
I am here today with Jim Voelzer, one of our pilot biologists for many years for the Fish and Wildlife Service, and we are here in beautiful Portland and will have Jim tell us about his life and career.

Jim Voelzer:
Well, thank you John. I was born in 1940 in Niagara Falls, New York, and my earliest memories of wildlife, which was ultimately to become my vocation, was stories my dad used to tell me about his hunting and fishing days in upstate New York. He started me fishing when I was 3-years-old and hunting when I was 4-years-old, but it never really occurred to me to make a career out of it. I'm going to skip my less than stellar academic career up through high school. We moved around upstate New York, and I spent most of my years in Rochester, New York in the township of Brighton.

In about January of my senior year in high school my dad called me into the living room and he said, "We've always talked about you going to college, are you going to go?" I said, "Well, sure." He asked, "What are you going to take up, what are you going to major in?" I said, "Gee, I really hadn't thought about that!" He thought a little while and he said, "Well, you like to hunt and fish, why don't you take up conservation?" Of course that's what they called wildlife management in those days, conservation. I thought, well what I knew about conservation was I'm probably going to be a game warden, but that sounded good, I might get to hunt and fish a little bit. To make a long story short, that was the genesis for my applying to several universities, and selecting or being selected by Utah State University in Logan, Utah, and which is where I started college. I graduated from there in wildlife in December of 1963. Because it was a land-grant college, I either had to physical education or ROTC, and so I went through the ROTC program for 4 years and got my commission in the Army. After summer camp at Fort Lewis, Washington in 1961, I decided that I would like to fly also. So, by taking a course in aviation my senior year in ROTC, it guaranteed me flight school in the Army, and I was set with an obligation of 3 years in the military if I went through flight school. Well, I made through flight school, and had about a year left on my career. After flight school I was assigned to Sharpe Army Depot in Lathrop, California as a test pilot, and thought I made through my military career without going to Vietnam, but they got me. So, in 1965 I shipped off to Vietnam and flew for a year, and then in 1966 I mustard out of the Army in Oakland, California.

In February of 1966, before I got out of the military and from Vietnam, decided I would like to work for the Fish and Wildlife Service. So, as naivety would have it, I sent a letter to the Director of U.S. Fish and Wildlife Service, Washington, D.C, "Dear Sir, I have a degree in wildlife and I fly airplanes, can I come and work for you?" Surprisingly I got an interesting response from the personnel office; there was a lady in Washington by the name of Larson who kind of took me under her wing. In later years, my first trip to

Washington, D.C. I went to see her to thank her for all of her help, and she had passed away a couple of weeks before. But I always got the feeling that somehow my situation reminded her of someone in her family, and she did more than she had to do to help me get a job.

Unbeknownst to me, at the time that I was in flight school at Fort Rucker, Alabama, the Fish and Wildlife Service had just acquired six de Havilland Beaver from the military, and the flyway biologist group at that time, Jake Chamberlin, Horton (G. Horton) Jensen, Art Brazda, and several others went down to Fort Rucker, Alabama to learn how to fly those Beavers. Ed Wellen was chief pilot at the time, and he went into the commander of the flight school and asked if there was anybody in the flight school that had a degree in wildlife, and they fumbled through the records and came up with my name, and this was totally unbeknownst to me. I relay this because it shows how small and close-knit the Fish and Wildlife Service was at that time. Well, when my letter from Vietnam went to Fish and Wildlife Service in Washington, D.C., one of the places they sent me application was down to Ed Wellen's office because he was the chief pilot. He said, "That's a strange name, I've seen it someplace before." So he dug into his records and recognized the name as coming from the commander of the flight school over a year earlier. Apparently, well at that time we were in the Division of Management Enforcement, it was before the Office of Migratory Bird Management was formed, this was in 1966, and Migratory Bird Office wasn't formed until 1973, so Ed went the management enforcement people and said, "Here's a possible candidate with a degree in wildlife and aviation background." They said, "Well, let's hire the guy, but we'll just him with refuges for a year and see how he does, and if he turns out okay then we'll think about hiring him." So they cut a deal with Region 3, again all of this unbeknownst to me, to hire me, and I started out with the Fish and Wildlife Service in November in 1966 at Crab Orchard National Wildlife Refuge in Carterville, Illinois. That I was all arranged, and I thought I was doing pretty well by following all of these steps and sitting there with bated breath, waiting to see if I would be selected. Of course, this was all set up beforehand, unbeknownst to me, and so I started at Crab Orchard in November of 1966.

In September of 1967, Ross Hansen, who was a flyway biologist in Minneapolis at the time, came down and we flew together for a week, and at the end of that week I obtained my flight authority from the Fish and Wildlife Service and started flying aerial surveys in southern Illinois and that part of the country. In 1967, Hank Hansen, who was then the Deputy Chief or Assistant Chief of Management Enforcement, came to Carterville, Illinois, I received a phone call one night and he said, "I'd like to talk to you." So I went over to the hotel and he was telling me about flyway biologist program. They apparently had had a vacancy, I think Robert Smith from Oregon who was in Oregon retired, Duane Norman had moved from Washington, D.C. to Portland, and that opened up a vacancy for a flyway biologist in Washington, D.C. So, I went in and listened to Hank, and Hank had been a pilot biologist for many years in Alaska, and was still flying at that time in Washington. He was telling me all about the flyway biologist program, it sounded pretty interesting, and then he said, "Well, we really need somebody to fly the Northwest Territories." I'm thinking the only Northwest Territories I'd ever heard of was in Australia. How naive we are, I said, "You're not talking about Australia?" "No" he said,

"The Northwest Territories in Canada." I said, "Well, where is that?" He said, "Well that's up north of the praries, it goes all the way up into the Arctic." My response was, "Well, I don't want to live there!" He said, "No, no, no you don't understand, you don't have to live there, you can live down here and go up there." I said, "Okay that sounds fine, I'd be interested."

So shortly thereafter I applied for the vacancy as a flyway biologist/pilot biologist with Management and Enforcement, and left Crab Orchard Refuge and moved to Washington, D.C. I was there from 1968 to 1971 as the Atlantic Flyway Biologist. In 1971 I transferred to Albuquerque, New Mexico, and I was a Central Flyway Biologist there from 1971 to 1979. After Ross Hansen retired they needed somebody to go to the Mississippi Flyway, but they were going to put the position in Columbia, Missouri where the flyway representative was situated. So I applied for that and was selected and became the Mississippi Flyway Biologist from 1979 to 1985. Then in 1985, Bill {Leonard} left the group, he was destined to go to Portland, and he left our group and transferred to Alaska. So that opened a vacancy in Portland, and I applied for that and became the Pacific Flyway Biologist. That was in 1985, in 1982 Duane Norman retired as Chief of the Waterfowl Population Survey Section in the Office of Migratory Bird Management, and I was appointed acting chief at that time, and ultimately was made permanent. So from late October of 1982 until April of 2005, I was Chief of the Waterfowl Population Survey Section, which in 2004 actually became a branch under a new organization. I had looked to retirement at the end of April of 2005, and actually had put my papers in to retire, and in discussions with the Division of Migratory Bird Management folks in Washington, I agreed to give up my duties as chief of the branch in favor of working another 6 to 8 months on aircraft acquisition, aircraft modification.

The aircraft that we originally flew back in the 1960s and early '70s, the Beaver and Grumman Goose aircraft became rather expensive to fly, hard to get parts for, so we went to Cessna 185 and Cessna 206, and those are the aircraft that we are flying now. Ultimately, the Office of Aircraft Services told us that we had to find a brand new airplane to fly because in flying the amphib 206s in the remote parts of Canada, U.S., and Mexico, we had to fly them over gross, and they didn't like that. So we've been trying for several years to come up with a new aircraft for aerial surveys, and we were hopeful now that we are coming pretty close to doing that. So that's what I've been working on for the last 6 months or so.

I'll go back now to a little bit before my time by about 15 years. After World War II when we got, when I say we, the Fish and Wildlife Service got surplus aircraft from the military and started hiring biologists that had aviation experience. In 1949-1950, it became apparent that the work we were doing on the mid-winter waterfowl surveys wasn't getting a good handle on the continental waterfowl populations. The idea came that we should be looking in the breeding grounds in Canada and north central U.S., and so my predecessors, the Horton Jensen's, and the Robert Smith's, and the Walt {Chrissies}, who were all pilot biologists at that time, from about 1950 to 1955, designed aerial surveys in May to get a handle on the breeding populations of waterfowl. Those surveys went operational in 1955. From the late '40s until 1955, the pilot biologists were

in the Division of Research. I'm not sure of the exact year, but sometime between 1955 and the early 1960s, because there was a need not only for pilot biologists but for aerial observers and duck banders to work with the flyway biologists, the flyway biologists were put in with the Division of Law Enforcement and it became the Division of Management and Enforcement. When I moved to Washington, D.C. in 1966, Chuck Lawrence was chief of the Division of Management, and Hank Hansen was the assistant chief for Management, and Marshall Stinnett was the assistant chief for Enforcement. The federal agents around the country would serve as aerial observers for the pilot biologists on the surveys in Canada, and they also served as duck banders and ran banding programs. This continued until about 1972, when the Division of Management and Enforcement was split up, the Division of Law Enforcement went its own way under Clark Bavin. The management group went into what was to be known as the Office of Migratory Bird Management, which not only drew from the pilot biologists but it also picked up the bird banding lab and later on the section of Population Habitat Assessment was formed. Bob {Bloom} was the first chief of that group. From there, up until the early 2000s, the Office of Migratory Bird Management was renamed the Division of Migratory Bird Management. In the early years, early years for me, some of my mentors were Horton Jensen, who I flew with for 8 years in the Northwest Territories. He had learned the Northwest Territories from Robert H. Smith, who was a flyway biologist in Medford, Oregon, and who had pioneered many of the surveys in U.S., Canada, and Mexico. The agent pilots, and the one that comes to mind Al Weinrich, who was the agent pilot in Sacramento, California, flew the May breeding grounds surveys for us in Montana and the western Dakota's when those areas were added to the survey design.

When I first started flying for the Division of Management and Enforcement in Washington, my first assignment was with Horton Jensen, who was one of the pioneers of these aerial surveys, and he and I flew together in the Northwest Territories from 1968 to 1975. It always seemed that as soon as we left civilization so to speak and (unclear) started to work north to the Arctic, something would go wrong the airplane. I can remember one year the nose gear on his airplane, one of the cables snapped, and the nose gear wouldn't go up on one side. So we flew the whole aerial survey with one nose gear down. The main reason for having amphibious floats on the aircraft is in case something goes wrong you can land on water. The Northwest Territories has a quarter of the world's fresh water supply, and so there's virtually a place to land everywhere. So here we were limping along through the Northwest Territories with one nose gear down, and if we'd try to land on water it would have flipped us over!

We had another experience one time where Horton had unfortunately landed with the gear up on a runway on his way up to Canada. Well, they jacked the plane up and put the gear down and he flew it off to a repair facility, but they never checked the aircraft to make sure that everything was sealed properly. Well, when we got up to Norman Wells, which is an Imperial Oil Refinery, a oil refinery about 60 miles south of the Arctic Circle, they used to put us up for free because there wasn't a hotel in town, and we got to know the people in town. Of course, one of the things that we did in exchange for free lodging and for eating in the mess hall was that we would take them fishing, because much like Alaska, the only way to go fishing is to go by airplane. So we would go on a

reconnaissance flight in July when we were doing the production surveys up there, and take different members of the refinery over to Kelly Lake for fishing. It's wonderful for grayling fishing. Well, we got over there this one year and we landed and taxied up and let everybody off and backed the de Havilland Beaver up on the shore, just put the back of the floats on the shore and tied it down well and went fishing. Well, we came back about 5 hours later and lo and behold, both floats had leaked and the plane was sitting on the bottom of the lake with about 1 inch of the float sticking above the water! No radios, no cell phones, no satellite phones or anything in those days, so we got out this little pump and we'd pump for awhile on one side to pump the water out of the floats and that side would come up a little ways, and then we'd go to the over float and, ultimately, after about an hour to an hour and a half of pumping, got the plane floating again. Well, we had 5 people in it, and so we took the cover off of the main float compartment and here were two little streams of water arcing up about a foot and a half on both sides of the floats, both floats. We managed to get everybody in the airplane and Horton fired up the airplane, I was holding onto the rope to keep it from taxieng down the lake, and pumping out the last float, and as a I let go of the rope, Horton pulled the power to it, I climbed into the airplane, and we managed to get off the lake with 5 people on board before the floats filled up with water again! So, you know, just one of those experiences.

As I said, we flew the Northwest Territories for about 8 years. The logistics of trying to get accommodations, sometimes we had phone connections, sometimes we didn't. I remember we went into Inuvik one time and went into the Eskimo Inn, it was a brand new hotel, and they put us in this great big long room, there were only two of us in there, Horton and I, and there were 2 cots, the room was probably 30 or 40 feet long and maybe 15 feet wide, and it had a little bathroom at the end. We thought this was interesting, a nice room. Well, we went down and had a few drinks and then had supper and came back after supper to go to bed, and there were another 25 cots in that room! All the rooms were gone and this one of the room where they were adding others, and so we had about 25 roommates that night, and most of them were drunk, so we didn't get a whole lot of sleep. That's the way things were done in the Arctic.

One time we went there and ended up sleeping on tables in the Canadian Wildlife Service Research Lab building because there were no rooms in town. So, accommodations were the most difficult part of the survey, always the unknown.

We went to Yellowknife one year. They didn't have any rooms in town so we were going to sleep in the lobby of the airport, and a guy came over to us and he said, "What are you guys doing?" We had our sleeping bags, and we said, "Well, we're just going to bunk here, there's no rooms in town." He said, "Are you flying that Fish and Wildlife Service Beaver out there?" And we said, "Yes." He said, "Oh, I remember the guy that used to fly up here, Bob Smith." He said, "Tell you what, I've got a spare bed down in my basement, you guys are welcome to it." He took us home, gave us the keys to his car, and told us we could use it all week, he never locked his house. He said, "You guys come and go as you want, just let me know when you leave." He said, "By the way, we've got television now in Yellowknife." What it was video, the video recordings or films so to speak. He invited us up one night to watch a brand new show, it was Ed Sullivan's Toast

of The Town, and it was in black and white, and they were just so enthused that they now had television. But what struck me was how friendly these folks were, and what a good name our predecessors had left for us, that somebody would feel it all right to turn their house over to us not knowing us, and just, you know, do as you like and welcoming. We found great hospitality up in that country, mainly as a result of our predecessors.

One year I came home from the territories flying the De Havilland Beaver, and then I went back banding in the summertime and I went up to Mills Lake, which is about 120 miles west of Yellowknife on the Mackenzie River. I had used a float plane up there, an amphibious 206, and when I closed out the banding program I was to take the 206 to Minneapolis and give it to Ross Hansen, he was flying a Cessna 182 at the time, and I was going to take the 182 back to Albuquerque and use it down there. So I did that, I took the float plane back to Ross and picked up his 182 and headed for Albuquerque. I got to Kearney, Nebraska and refueled. I noticed when I did the run up that there was a slight backfire in the engine, but I tested it a couple of times and it seem to work, and I had to get home. So I pulled the power to it and headed for Albuquerque, and I got over Stockton Reservoir in northern Kansas, I was about 4000 feet in the air, and the engine let go, I heard a big bang. So thinking immediately and as much as I've been flying the float plane all these years, how fortuitous that this engine should quit right over the top of a reservoir, and then I realized that I didn't have any floats on the airplane. So, the only time that I have ever used a Mayday! I got on the emergency frequency and called a Mayday, and the flight service station from Hill City, Kansas answered my call. I told the guy, "I've had an engine failure and I'm going down." I said, "I'm going to try and put in a field, but I may have to put it in the water, can you get somebody over here?" He said, "You know, I know that area." He said, "When they built that lake, there right at the bottom of the dam, just below the dam on that lake there's an airstrip." I looked down, it wasn't on the navigation maps, but it was there, and it was an active strip, and they kept it plowed. I was able to get plane down onto the air strip, and there was just enough engine power left to taxi, and I taxied back and I found 2 cement tie downs. I mean, who would guess! I pulled into the tie down and I got out of the airplane, and it's all covered with oil and it's a mess. Here comes this car just screaming up and slamming on the brakes, and this guy jumps out, and I thought, jeeze, they got somebody here really quick! He said, "I saw your airplane and saw all the black smoke." He said, "Where are you headed for?" I told him. He said, "Where have you been?" I said, "Well, I'm with the Fish and Wildlife Service, I've been flying up in Canada." He said, "Oh, what's your name?" I told him, and he said, "Okay, thanks." He runs back and gets in the car. I said, "Hey, wait a minute, I need some help here. Where are you going?" He said, "Well, my aunt writes an article for the local newspaper, and I've got to get this information to her so she can get it into today's paper." He disappears! So I'm thinking, what the heck! So I waited around, waiting for somebody to show up, a mechanic. Shortly thereafter, about 20 minutes later, a state trooper pulls up. He asked basically the same questions "Are you okay?" I say, "Yeah, everything's fine." He said, "Okay." Well he drives away! So I waited another half hour, so nobody shows up, and it kind of reminds of that movie, Field of Dreams, because right next to the airstrip was a cornfield, and I could look over the edge of the corn and see a chimney of a farmhouse. So I walk through the cornfield, merged on the side, went up and knocked on the door. A nice lady came to the door and I

said, "I've had an engine failure and my plane is over on the airstrip, could I use your telephone?" So she said yes. So I went in and through information got the telephone number of the Hill City, Kansas flight service station and called them. They said, "Well, we sent the state police over." I said, "Hey, I need a mechanic, I don't need police." So about 2 hours later a mechanic shows up. I left the plane in his hands. We took the radios out of the airplane, tied it down, and went back to Hill City. I said, "Well, can I rent a car?" He said, "No, we don't have any car rentals here in town." But he said, "A buddy of mine is a salesman and he is going to Hays, Kansas tomorrow, you can go with him, they have rentals cars down there." So I spent the night in Hill City, Kansas. I got a ride to Hays the next day and got a rental car. I guess this just wasn't my year because when I got to Dodge, the rental car quit! It was about 3:00 or 4:00 in the afternoon, and I thought, this is going to be interesting. So I went into a gas station and the guy that ran the gas station told me that yeah, there was an Avis car dealer in town, but that the guy that ran it was a bartender at the local golf course. So he gave me a ride out to the golf course, I got hold of the bartender, the bartender came down when he got off work and exchanged cars with me. Okay, now I got a car and I drive to Albuquerque, everything was wonderful. I get home, I haven't been home for a month and a half, and my wife greets me at the front door. I was figuring, I'm going to go in here, say hello to wife, take my shotgun, take my dog for a walk, and we're going to go dove hunting because it was September. She greets me at the front door, my dog is barely making it to the front door because he's been bitten by a rattlesnake, and so he's laid up. I said, "This thing isn't going good at all!" Well, the end of the story was 2 weeks later when I was sitting in my office in Albuquerque and I received a phone call from wife, and she said, "There are 2 FBI agents here, and they want to know what you did with that car that you rented in Hays, Kansas because it never showed up in Albuquerque." She said, "I told them I didn't think you'd steal a car!" Well, ultimately we satisfied the FBI. But that was a strange play of events, and something that has always stuck in my mind.

Another of the major programs that we had in Canada was the summer waterfowl banding program. Honestly, I don't know what year it started, but I would say it was concurrent with the surveys, and probably post-1955. When the flyway biologist group merged with the law enforcement group, the Division of Management and Enforcement, the agents became duck banders and, in those days, most of the agents had degrees in wildlife. Generally speaking, the flyway biologists were the crew leaders but not in all occasions. We ran banding stations in Prairie Canada, generally Alberta, Saskatchewan, and Manitoba. We had some bush areas in northern Manitoba around Thompson where they banded and in the Northwest Territories at Mills Lake. That was about as far north we went in the early days.

The thing that sticks in my mind is some of the stories that Horton Jensen used to tell me about the summer banding program, where they would go out, the initial program started in July, it wasn't an August banding program, it was a July program, and they would drive trap molting birds. In the early years we didn't have the July production survey yet, and so it was possible to do that. Later on, of course, as the July surveys progressed, we had to move from a drive trapping operation to a bait trapping operation because the birds, of course, were able to fly in August. But some of the stories that Horton Jensen

would tell about being in the prairies in southern Alberta and banding upwards of 1000 mallards a day, drive trapping them, and in a week it wasn't unusual to band a couple of thousand mallards. Today, I don't think you could find a place in southern Alberta, or any other place, even at Old Wives or White Water Lake, where you could drive trap birds and get that many. It says something about waterfowl populations, the magnitude they used to be versus what they are now. I don't want to go into any details beyond that, but today you just can't find places where there are as many birds as there used to be, and that's documented by the banding evidence. In 1973, when the Office of Migratory Bird Management was formed, the Law Enforcement Agents went their separate ways as I mentioned before, and Lynn Greenwalt was director at the time, and when the Office of Migratory Bird Management was formed he made the declaration to the regional directors that, henceforth, individuals that would serve as observers and duck banders would come from the selected regions, and not from Law Enforcement Division.

My first bush banding experience was in 1970 with Art Brazda up at Fort Chipewyan in Alberta. We lived in a little cabin, the back of the Mounties headquarters, and we used to fly each morning from the town of Fort Chipewyan to the bait traps. We had one occasion for a couple of weeks where the water had receded to the point that we couldn't land very close to the traps, so we baited them from the air. We would fly over the traps and while Art was slowing the airplane down and flying over the traps, I opened the camera hatch in the bottom of the airplane and would dump a bag of grain out through the bottom of the airplane and hope most of it, or at least some of it went into the trap. That ended up working pretty well. We had a guy from the local community work with us by the name of Fred "Jumbo" Fraser; he ultimately was major of Fort Chipewyan. He was a wonderful guy to work with. During the summer when we were flying around the Delta, going back and forth to different duck traps, we would locate occasionally a moose, and over the summer we saw, I think, 4 or 5 moose and, ultimately, within 24 hours they'd been shot and packaged and hauled into town, and so Jumbo was looking out for his own interest as well as ours!

The following year I went up to Mills Lake to band. We had a 16 foot Lund outboard that was used, and also one of the original Bear River Air Boats that Horton Jensen had made back in the '50s. I guess they assumed because I could fly an airplane that I knew something about air boats. I didn't, and was too proud to ask. I can remember starting up the air boat for the first time, it was an aircraft engine so I knew how to start it but I had no idea on how to operate the thing. I was sitting on a grain sack and fired up the engine and, of course, had the throttle advanced too much and it threw me back against the wind screen, and the boat took off across the Mackenzie River! Fortunately, I got control of it and nothing bad happened like it did with Don Frickie, who got that little air boat into some rough water a couple of years before and sunk the boat! Fortunately, the tip of the boat was still out of water, they were able to swim to shore and tie it to a tree and get some help from town after they walked into town. Ultimately, they got the boat back into water. It didn't hurt the engine any to be sunk, they just drained it out, fired it up, and it worked fine. A little Continental 65.

Three of the four years that I banded at Mills Lake we had a native from Hay River by the name of {Pat Buggins}, and Pat had worked for Fish and Wildlife Service up there for 14 years banding ducks. He was quite the guy, he didn't like the fact that the best we could do was Dinty Moore Beef Stew! We were living in a game cabin, a log cabin that didn't have any facilities whatsoever, and so mainly what we had to eat was canned food, and so Pat would go down river and trade dead ducks to his buddies that were fishing along the river and he'd get some fresh fish for us occasionally. My fishing pole had broken and Doug Bennings pole was too small for the size of the fish up there, so we couldn't even catch fish. Talk about people being naive about the goings on up there! But Pat went down river one night, took the boat, took the Lund boat, and he was going to go down and play cribbage with his friends that were camped along the river. Doug and I got up the next morning and Pat wasn't there, and so we figured, well, who knows what happened, he probably got into the sauce a little bit and slept in. So Doug and I ran the traps and we came back that night and no Pat. Well, the next day the weather was kind of crummy, and he didn't show up the second day. So we made up our mind that something had happened to him and so third day, after we ran our traps, we were going to go into the Mounties and have them do a search. Well, we're making breakfast the third morning and we could hear the motor coming, and here came the boat and we could hear Pat coming down the path to the cabin. He walked into the cabin with a big grin on his face and he's got what looked like about a 10 pound beef roast, and actually it was caribou. What had happened is that somebody from the Indian community had shot a caribou down river about 30 or 40 miles, and they didn't have anyway to get it back. So Pat said, "Well, I got a boat, I'll go down and get it for you." That's kind of the way things are done in the Northwest Territories, everybody can't have everything. So if you've got a hammer, I've got a hammer. If you've got a saw, you've got a saw. It's just kind of the way things were done, if somebody needed something and Pat had it.... But he never bothered to come tell us, so we were worried sick that something had happened to him. Things went fine after that, we asked him if he was going to do that again to please let us know so we wouldn't worry about him.

One of the things that make the job of a flyway biologist different, and for those of us that accept the job special, has to do with all of the traveling that we get to do. Of course there are benefits and detractions in that regard. It's difficult on a family for an individual to be gone 6 months out of the year. We probably are in travel status on the average of 140 days a year, and we have had individuals that have been gone as much as 200 days a year. When someone calls me and indicates an interest in the job, the first thing I do is explain to them the annual flyaway biologist cycle. Generally, I start with April, which is early April, which is our annual work planning meeting, where we meet not only with other entities of the division that deal with our data, but also with the Canadian Wildlife Service and NGOs that we might work, like Ducks Unlimited. We have that meeting for a week. Within 2 weeks of that meeting in April, the aerial surveys start in eastern Canada, followed closely the first of May by the surveys in western Canada and the north central U.S. Those surveys are usually 3 to 4 weeks in duration. When we get back from that, we have the reports to write shortly thereafter, with the exception of the last couple of years where we've had budget problems. The prairie crews go back to Canada for 2 to 3 weeks to fly the production survey. Originally, back in the early, or my early years in

the late 60s and early 70s, we even flew July surveys in the Northwest Territories. But, unfortunately, now the regulatory process has been advanced to the point where it's not possible to get data from the Northwest Territories in time for the regulatory meeting. By the end of July the crews are gearing up to run the summer banding program and generally the people leave around the 27th or 28th of July, they are in Canada all summer banding, they get back probably Labor Day or shortly thereafter. In late July we have selected crane surveys and white-front surveys in the mid-continent. By the first of October most of the people get a little bit of a breather for a couple of weeks, and then the geese show up and we start doing fall goose surveys. Many of our pilot biologists are involved in goose productivity surveys, which were started by Johnny Lynch and Singleton back in 1948. They continue to today for geese, swans, and brant. Selected populations of geese: Snow geese, and white-fronts. Those surveys, combined with other fall surveys that are done by refuges, where we will fly missions for the regions, continue up to Christmas. The first week in January we have the annual mid-winter waterfowl survey, which in some flyways gets extended up to 4 weeks, and our crews are gone for most of that period. Concurrent with the mid-January surveys in the U.S., we fly a complete survey of Mexico every 3 years. We have done it as frequently as every year, and as little as every 5 years. The Mexico mid-winter survey is divided into 3 survey areas, so it takes 3 crews in the years we fly all of Mexico, the east coast, central highlands, and the west coast. Then in the off 2 years we have been flying a short survey in northeastern Mexico and the Laguna Madre, down as far as Tampico just to complete the Laguna Madre survey that is done off the Texas coast. We also in the off years fly a black brant survey on the west coast of the Baja. A few years ago we sent 3 crews down to Managua, Nicaragua for a meeting with some 14 countries. It was a meeting called by Ducks Unlimited, and the purpose was to establish basically a technical committee, if you will, of Latin America and Caribbean countries to do selected waterfowl surveys. They do 5 surveys a year now, and one of those surveys corresponds with our mid-winter survey. So, ultimately, we will have a mid-winter survey count that goes from southern Canada, all the way down through northern South America. Following that survey, our crews are usually gone; some of the flyway biologist are gone to flyway technical committee meetings and waterfowl wing bees, each taking up a week of time, and before we know it, we are back to April 1st again. Like I said, it can be anywhere from 85 to say 200 days a year that our people are in travel status, and that calls for a strong, supportive home, and the confidence in those that have to remain behind to be able to handle things. Consequently, many people that have called me interested in the job, when they found out that you have to travel that much, they find that that's not something that would work well with their family situation, so they decline any further interest. It's a unique position, when I started there were 7 of us when I started as Chief of the Waterfowl Population Survey section in 1982, and now we're up to 13 people. We've added eastern Canada to the traditional survey areas. In May we cover all of Canada except the high Artic and British Columbia, and there are some studies now ongoing to try to do something in British Columbia, but it's very difficult because of the terrain, we haven't come up with an answer for that yet.

One of the things that might be of interest is some observations on the ebb and flow of waterfowl populations over the years that I have been involved with it. In my early years,

the late 60s through about 1976, waterfowl populations seemed to be fairly stable. They rose and fell one year to the next, but didn't seem to be any significant changes. But then I can recall in 1976, the beginning of a drought in the prairies, and it kind of would change from one year to the next for the first few years, never really getting wet, and then we got into the real drought cycle, which didn't peak until 1988. I can remember some of the early formulas and SOPs for waterfowl survey, and our own SOP indicates that the Northwest Territories habitat is stable, and doesn't change significantly from one year to the next. I believed in that myself for many years. Sometime in the late 80s or early 90s I had the opportunity to work in the Northwest Territories and in the Prairies, and I also flew Mexico, and I was flying the Central Highlands of Mexico at that time and in January I noticed the drought all the way down through southern Mexico, and I followed that drought all the way up through the U.S. and into Canada. At the end of the banding program, and I'm thinking this must have been around 1989 or 1990, Jim Goldsberry and I took a flight and we went up through the Northwest Territories to visit some of our banding stations, and I was amazed at the drought conditions that I saw in the Northwest Territories, all the way up as far as Arctic Red River, which is at the south end of the Mackenzie Delta, south of Inuvik, and I hadn't seen the Northwest Territories in many years. So, I think our statement, our belief that habitat conditions in the bush are stable and don't change significantly is an error, because I saw it firsthand. Now, how does this impact waterfowl populations? I'll leave to other people, but I suggest that it may be one of the causes for the decline in (unclear) populations over the years.

In the early 1990s, there was an eruption at Mt. Pinatubo in the Philippines, and I mention this because shortly after the beginning of my career in the late 60s, we were aware of draining of marshes of potholes and loss of habitat and declining waterfowl populations in the last 1980s, and we wondered if waterfowl populations would ever be able to rebound if the water came back. I recall seeing on the television a climatologist explaining the effects of Mt. Pinatubo, and he had a map on the board and he showed a shaded area that came right up through the northwest portion of the United States, and included the Canadian Prairies and parts of the North Country. His estimate was that the earth would cool, what seems to me it was like half of a degree or three-quarters of a degree in this area, the shaded area being the ash from Mt. Pinatubo that was going to remain in the air, and he said this area was going to have above normal rain fall for the next 4 or 5 years and, indeed, that happened. We saw the prairies get wet again, we saw parts of the bush get wet again, and we saw waterfowl populations respond significantly. The one area that did not recover during that period was southern Alberta and southwestern Saskatchewan, which traditionally was the heart of pintail country. So even though other populations increased significantly, the water didn't return to the southern portions of pintail areas, and so, as one might suspect, and to this day, that country has not recovered generally as far as nesting conditions are concerned for pintail. So one might look at that and understand why the bush populations of pintails remain fairly stable, and the prairie populations of pintails have crashed. Also, at least from my experience, we haven't tried to manage for pintails in their traditional areas in the prairies.

John:
Jim, flying over the prairies and the Northwest Territories and Mexico over your career gives you a unique perspective of kind of a landscape view. You just talked about changes in water, which are a result of cycles and all kinds of mostly natural events, but I imagine that you've seen some real changes in land use patterns in your career in different places, and I wonder if you could make some general comments on that.

Jim:
One of the things that I've seen occur, of course, in Prairie Canada is the draining of potholes, and we realize that that's ongoing. Up until at least recently, Canada has not had a program to save their wetlands have we have become more enlightened to do south of the border. I was a little disappointed as the bush was cleared from basically north of Edmunton, up as far as Peace River. The Canadians had a real opportunity there to save their potholes, to prevent the draining of potholes and, of course, as this happened in other areas, they didn't do it, so a lot of the potholes that existed in that portion of Alberta, from Edmunton up to Peace River. Actually, I would think that the waterfowl population and nesting populations have declined a little bit because the habitat has been changed.

The significant thing that I've seen in the U.S. has been the Conservation Reserve Program, and different states have responded differently to that CRP Program. In places like western South Dakota that I'm familiar with, they've been pretty good about maintaining the program and keeping the farmers in concert with the contract that they signed. Montana, up until a few years ago, had not gotten into the CRP. They did it about 3 years ago and basically leveled it, and that was a real detriment to the waterfowl nesting. The state that I've seen the greatest impact is in North Dakota, where they seemingly find an excuse to get into the CRP every year. They could significantly increase their production of waterfowl if they'd leave that CRP alone, but they seem to find a way, whether it's a claim of drought, a claim of too much water, a claim of pastures being flooded, too dry, but they just seem to always find some reason to get into their CRP there. It really doesn't help the waterfowl or the upland game birds.

In Mexico, the biggest change in habitat that I've seen has been along the west coast down around Laguna Pabellon and areas around Toplobampo, where they were traditional pintail wintering areas. When I first started flying down there, the natural desert was continuous with the exception of right around the city of Las Mochis, from the border and all the way down to the Marismas Nacionales, which is south of Mazatlan. More recently, all of that area between Mazatlan and Ciudad Obregon has been cleared, it's all croplands like the Imperial Valley in California, and all of the streams that used to come out of the mountains and empty into the lagoons and fresh water streams have been dammed up. The water used for irrigation of the crops, and then the waste water from that use is shunted back into the traditional stream beds, replete with agricultural effluent. Many of the areas that used to be major pintail wintering areas as well as wintering areas for widgeon and shovelers and green wings are now solid cattails as a result of that, and there are stretched 40 miles long of solid cattails down there, and these are cattails like I've never seen before, they are 15 feet tall! There's no way to get into it. In areas that

used to be used by waterfowl now are gone, the birds have tried to use other areas but there are no areas that big, so there's a real stress on the birds down there. Waterfowl hunting in Mexico is a little different than it is here, they put sports in blinds and then they haze the duck with air boats into the blinds, and it's become something I'd rather not see, but that's the way they do it down there.

I guess I've been fortunate in my career to be in the right place at the right time many times, and I think back on 42 years of federal service here in another couple of minds. The thing that really jumps out at me is the people that I've worked with, not only in my own group. I kind of talked about how we did this and we did that, but we couldn't have done it without the help of many of other entities of the Fish and Wildlife Service, our friends in the Canadian Wildlife Service, Ducks Unlimited, and other agencies too numerous and people too numerous to mention at this point. It's been a real satisfying career, and even though the resource is of utmost importance, it's the people that you work with that really make the job enjoyable, and that's been a real boon to my career just working with people that had the same desires to protect the resource and manage it properly that I've had.

Key Words: Utah State University in Logan, Utah, de Havilland Beaver airplanes, Grumman Goose aircraft, Cessna 185 airplanes, Cessna 206 airplanes, Office of Aircraft Services, flyway biologist, pilot biologist, Jake Chamberlin, Horton (G. Horton) Jensen, Art Brazda, Ed Wellen, flyway surveys, Division of Management Enforcement, Office of Migratory Bird Management, Crab Orchard National Wildlife Refuge in Carterville, Illinois, Hank Hansen, Deputy Chief or Assistant Chief of Management Enforcement, Robert Smith, Duane Norman, Northwest Territories, Atlantic Flyway Biologist, Central Flyway Biologist, Mississippi Flyway Biologist, Pacific Flyway Biologist, Duane Norman, chief of the Waterfowl Population Survey Section in the Office of Migratory Bird Management, Ross Hansen, chief of the Waterfowl Population Survey, mid-winter waterfowl survey, continental waterfowl populations, Division of Research, Chuck Lawrence, chief of Division of Management, Marshall Stinnett, assistant chief for Enforcement, Clark Bavin, Office of Migratory Bird Management, Division of Migratory Bird Management, Population Habitat Assessment, agent pilots, Al Weinrich, Inuvik, Eskimo Inn, Canadian Wildlife Service Research Lab, summer waterfowl banding program, Alberta, Saskatchewan, and Manitoba banding programs, Yellowknife, Mackenzie River, drive trap operation, bait trap operation, mallards, Old Wives Lake, White Water Lake, Lynn Greenwalt, bird banding, bush banding, Art Brazda, Fort Chipewyan, Fred "Jumbo" Fraser, Fort Chipewyan, Bear River Air Boat, Mills Lake, Don Frickie, Hay River, Doug Benning, Canadian Wildlife Service, Ducks Unlimited, crane surveys, white-front (white-fronted goose) survey, fall goose survey, John Lynch and Singleton, geese, swan, and brant surveys, mid-winter waterfowl survey, Mexico mid-winter survey, Laguna Madre survey, black brant survey west coast of the Baja, Duck Unlimited Managua, Nicaragua waterfowl survey, annual flyway biologist cycle, flyway technical committees, waterfowl wing bees, late 1970s to mid 1980s drought, Jim Goldsberry, Arctic Red River, Mackenzie Delta, Mt. Pinatubo, pothole drainage, marsh drainage, pintails, Edmunton, Peace River, Conservation Reserve Program, Laguna

Pabellon, Toplobampo, Las Mochis, Marismas Nacionales, Mazatlan, Ciudad Obregon, Imperial Valley, California, widgeon ducks, shoveler ducks, green wing ducks.